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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/563,215	04/26/2006	Nozomu Tanaka	080306.57204US	8184
23911 CROWELL & I	7590 12/16/200 MORING LLP	EXAMINER		
INTELLECTUAL PROPERTY GROUP			UNDERWOOD, DONALD W	
	P.O. BOX 14300 WASHINGTON, DC 20044-4300		ART UNIT	PAPER NUMBER
			3652	
			MAIL DATE	DELIVERY MODE
			12/16/2008	PAPER

## Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)			
	10/563,215	TANAKA ET AL.			
Office Action Summary	Examiner	Art Unit			
	Donald Underwood	3652			
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address			
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period w  - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 16(a). In no event, however, may a reply be tim ill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	I.  lely filed  the mailing date of this communication.  O (35 U.S.C. § 133).			
Status					
1) Responsive to communication(s) filed on 11 Se	eptember 2008.				
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<i>;</i> —	<i>,</i> —				
	closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.				
Disposition of Claims					
4)⊠ Claim(s) <u>1,4-6,10,11,14-17 and 19-21</u> is/are pending in the application.					
4a) Of the above claim(s) is/are withdrawn from consideration.					
5)⊠ Claim(s) <u>17 and 19-21</u> is/are allowed.					
6)⊠ Claim(s) <u>1, 4-6, 10, 11 and 14-16</u> is/are rejected.					
7) Claim(s) is/are objected to.					
8) Claim(s) are subject to restriction and/or	election requirement.				
Application Papers					
9)☐ The specification is objected to by the Examiner.					
10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.					
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).					
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).					
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.					
Priority under 35 U.S.C. § 119					
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of:					
1. Certified copies of the priority documents have been received.					
<ul><li>2. Certified copies of the priority documents have been received in Application No</li><li>3. Copies of the certified copies of the priority documents have been received in this National Stage</li></ul>					
application from the International Bureau (PCT Rule 17.2(a)).					
* See the attached detailed Office action for a list of the certified copies not received.					
See the attached detailed Office action for a list of the certified copies not received.					
Attachment(s)	Λ.Π	(DTO 440)			
Notice of References Cited (PTO-892)     Notice of Draftsperson's Patent Drawing Review (PTO-948)	4) ∐ Interview Summary Paper No(s)/Mail Da				
3) Information Disclosure Statement(s) (PTO/SB/08)  5) Notice of Informal Patent Application					
Paper No(s)/Mail Date 6) Other:					

## **DETAILED ACTION**

Receipt of applicants' substitute specification filed 09/11/08 is acknowledged. It has not been entered since it comprises new matter. The addition of mortise and tendon is new matter. See the 112 first paragraph rejection below. Also the marked up copy of the specification submitted at the same time is not a true marked up copy. For example, mortise and tendon added in paragraph 0052 is not indicated as added in the marked up copy nor are the paragraph numbers. All changes must be noted in the marked up copy.

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1, 4-6, 10, 11 and 14-16 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The use of mortise and tendon in claims 1, 6 and 11 comprise new matter since it is more defined than lug and hole which was used in the original disclosure. The claims should be amended to only use lugs and holes.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 16 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The neutral axis should be defined in the claim relative to the other claimed structure.

Applicants' remarks have been carefully considered but are not deemed persuasive. The specification should and does provide support for the neutral axes. However, 112 second paragraph requires the elements in the claims be positively correlated with each other to define an operative device. Thus the neutral axes must be clearly defined in the claim. This requires positively correlating these axes with the other claimed elements.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 4, 6 and 10 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Japanese reference 292428.

Applicants' arguments have been carefully considered but are not deemed persuasive. Figure 8 in the Japanese reference discloses the lugs and holes used between all plate connections and elements 20K and 20H in the reference are each reinforcing plates.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Apgar in view of Savoy, et al. as applied and for the reasons set forth in the Office action mailed 06/11/08.

Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Godwin, et al. in view of Savoy, et al. as applied and for the reasons set forth in the Office action mailed 06/11/08.

Claims 11, 14 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Japanese reference 240102 in view of Japanese reference 292428 as applied and for the reasons set forth in the Office action mailed 06/11/08.

Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over

Japanese reference 240102 in view of Japanese reference 292428 as applied to claim

11 above, and further in view of Japanese reference 082705 or Japanese reference

064353 as applied and for the reasons set forth in the Office action mailed 06/11/08.

Applicants' arguments regarding the above art rejections have been carefully considered but are not deemed persuasive since Japanese reference 292428 and Savoy, each teach the use of lugs and holes as originally disclosed by applicants. The fall back to mortise and tendon is more precise than the original lugs an holes and is thus new matter as noted in the 112 first paragraph rejection above.

Claims 17, 19, 20 and 21 are allowed.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Application/Control Number: 10/563,215

Art Unit: 3652

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Donald Underwood whose telephone number is 571-272-6933. The examiner can normally be reached on Mon-Thursday 7:30-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Saul Rodriguez can be reached on 571-272-7097. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Donald Underwood/ Primary Examiner, Art Unit 3652

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